Lloyd's Register

Rules and Regulations for the Classification of Ships, July 2010

Notice No. 8

Effective Date of Latest Amendments:

See page 1

Issue date: May 2011

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RULES AND REGULATIONS FOR THE CLASSIFICATION OF SHIPS, *July 2010*

Notice No. 8

This Notice contains amendments within the following Sections of the *Rules and Regulations for the Classification of Ships, July 2010.* The amendments are effective on the dates shown:

Part	***Chapter***	***Section***	***Effective date***
1	3	1	Corrigendum
1	3	9	1 July 2011
3	4	2, 5, 7	1 July 2011
3	4	2	Corrigendum
3	6	7	Corrigendum
4	1	8	Corrigendum
4	7	12, 13	Corrigenda
4	9	1	Corrigendum
6	1	2	Corrigendum
6	2	1, 10	Corrigenda
8	1	1	Corrigendum

It will be noted that the amendments also include corrigenda, which are effective from the date of this Notice.

The *Rules and Regulations for the Classification of Ships, July 2010* are to be read in conjunction with this Notice No. 8. The status of the Rules is now:

Rules for Ships	Effective date:	July 2010
Notice No. 1	Effective date:	1 October 2010 & Corrigenda
Notice No. 2	Effective date:	1 January 2011 & Corrigendum
Notice No. 3	Effective date:	1 January 2011 & Corrigenda
Notice No. 4	Effective date:	1 February 2011
Notice No. 5	Effective date:	1 July 2011 & Corrigenda
Notice No. 6	Effective date:	1 July 2011 & Corrigenda
Notice No. 7	Effective date:	1 July 2011
Notice No. 8	Effective date:	1 July 2011 & Corrigenda

Part 1, Chapter 3
Periodical Survey Regulations

CORRIGENDUM

■ *Section 1*
General

1.6 Preparation for survey and means of access

(*Part only shown*)
1.6.11 For ships assigned the ~~quotation~~ notation **ESP**, the owner is to respond to a Survey Planning Questionnaire and to prepare a Survey Programme, *see* 6.3, 7.3 and 8.3. In such cases, the following requirements are applicable:

Effective date 1 July 2011

■ *Section 9*
Ships for liquefied gases

9.7 Special Survey I (ships five years old)

(*Part only shown*)
9.7.4 The non-destructive testing of cargo tanks is to be carried out as follows:

(a) Non-destructive testing is to supplement cargo tank inspection with special attention to be given to the integrity of the main structural members, tank shell and highly stressed parts, including welded connections as deemed necessary by the Surveyor. However, for Type C tanks non -destructive testing cannot be dispensed with in entirety. The following items are, inter alia, considered as highly stressed parts:

Part 3, Chapter 4
Longitudinal Strength

Effective date 1 July 2011

■ *Section 2*
General

2.3 Open type ships

2.3.2 For ships with large deck openings such as containerships, sections at or near to the aft and forward quarter length positions are to be checked. For such ships with cargo holds aft of the superstructure, deckhouse or engine room, strength checks of sections in way of the aft end of the aft-most holds, and the aft end of the deckhouse or engine room are to be performed.

CORRIGENDUM

2.5 Direct calculation procedures

2.5.2 Lloyd's Register's (hereinafter referred to as 'LR') direct calculation method involves derivation of response to regular waves by ~~strip theory~~ appropriate sea keeping software, short-term response to irregular waves using the sea spectrum concept, and long-term response predictions using statistical distributions of sea states. Other direct calculation methods submitted for approval should normally contain these three elements and produce similar and consistent results when compared with LR's methods.

Effective date 1 July 2011

■ *Section 5*
Hull bending strength

5.3 Design still water bending moments

5.3.7 When considering ballast water exchange using the sequential method, the requirements of 5.3.5 and 5.3.6 do not apply. However, bending moment and shear force calculations for each de-ballasting or ballasting stage in the ballast water exchange sequence are to be included in the loading manual or ballast water management plan of any vessel that intends to employ the sequential ballast water exchange method.

5.4 Minimum hull section modulus

5.4.5 Outside 0,4*L* amidships, as a minimum, hull girder bending strength checks are to be carried out at the following locations:

(a) In way of the forward end of the engine room.
(b) In way of the forward end of the foremost cargo hold.
(c) At any locations where there are significant changes in hull cross-section.
(d) At any locations where there are changes in the framing system.

■ *Section 7*
Hull buckling strength

7.1 Application

7.1.3 Hull buckling strength ~~outside 0,4*L* amidships and hull buckling strength~~ for ships less than 90 m in length will be specially considered.

7.1.4 Hull buckling strength outside 0,4*L* amidships of members contributing to the longitudinal strength and subjected to compressive and shear stresses is to be checked, in particular in regions where changes in the framing system or significant changes in the hull cross-section occur.

Part 3, Chapter 6

Aft End Structure

CORRIGENDUM

■ *Section 7*
Sternframes and appendages

7.6 Propeller hull clearances

7.6.1 Recommended minimum clearances between the propeller and the sternframe, rudder or hull are given in ~~Table 6.7.3~~ Table 6.7.5. These are the minimum distances considered desirable in order to expect reasonable levels of propeller excited vibration. Attention is drawn to the importance of the local hull form characteristics, shaft power, water flow characteristics into the propeller disc and cavitation when considering the recommended clearances.

Part 4, Chapter 1

General Cargo Ships

CORRIGENDUM

■ *Section 8*
Double bottom structure

8.2 General

8.2.3 Small wells constructed in the double bottom, in connection with the drainage arrangements of holds, are not to extend in depth more than necessary. A well extending to the outer bottom, may however, be permitted at the after end of the shaft tunnel of the ship. Other well arrangements (e.g. for lubricating oil under main engines) may be considered provided they give protection equivalent to that afforded by the double bottom. In no case shall the vertical distance from the bottom of such a well to a plane coinciding with the keel line be less than 500 mm for passenger ships and cargo ships other than tankers. Keel line is defined in SOLAS Chapter II-1, Part A, ~~Regulation 1~~ Regulation 2.

Part 4, Chapter 7

Bulk Carriers

CORRIGENDA

■ *Section 12*
Steel hatch covers

12.4 Load model

(*Part only shown*)

12.4.1 The pressure, *p*, in kN/m^2, acting on the hatch covers is given by:

(a) For ships of length 100 m or greater, for hatchways located on the freeboard deck, *p* is to be the greater of 34,3 or the following:

(b) For ships less than 100 m in length, for hatchways located at the freeboard deck, *p* is to be the greater of 0,195*L* + 14,9 or the following:

■ *Section 13*
Hatch coamings

13.1 General

13.1.2 For the structure of hatch coamings and coaming stays, the corrosion addition ~~t_e~~ t_C is to be 1,5 mm.

Part 4, Chapter 9

Double Hull Oil Tankers

CORRIGENDUM

■ *Section 1*
General

1.3 Class notation and applicable Rules for CSR Double Hull Oil Tankers

1.3.5 Ice strengthening is to be in accordance with ~~Pt 3, Ch 9~~ Part 8.

Part 6, Chapter 1

Control Engineering Systems

CORRIGENDUM

■ *Section 2*
Essential features for control, alarm and safety systems

2.10 Programmable electronic systems – General requirements

2.10.12 Where regular battery replacement is required to maintain the availability of volatile memory back-up power supply required by 2.10.10, these are to be included in the schedule of batteries required by Ch 2, ~~1.2.11~~ 1.2.12 and 11.7, irrespective of battery type and size. Applicable entries in this schedule are to note that these batteries are not for safety critical systems or essential or emergency services.

Part 6, Chapter 2

Electrical Engineering

CORRIGENDA

Section 1
General requirements

1.2 Plans

1.2.9 Evidence of the suitability of electrical and electronic equipment for use in protected areas and adjacent areas, as required by ~~16.3.11~~ 16.3.9 and ~~16.3.12~~ 16.3.10, including a schedule of electrical and electronic equipment located in protected areas and adjacent areas, and general arrangement plans showing the coverage of the protected areas and adjacent areas.

1.11 Earthing of non-current carrying parts

1.11.4 Armouring, braiding and other metal coverings of cables are to be effectively earthed. Where the armouring, braiding and other metal coverings are earthed at one end only, they are to be adequately protected and insulated at the unearthed end with the insulation being suitable for the maximum voltage that may be induced. *See* ~~13.9.5~~ 13.9.4 for earthing of cables in hazardous zones or spaces.

Section 10
Electric cables and busbar trunking systems (busways)

10.2 Testing

10.2.1 Routine tests, consisting of at least:

(a) measurement of electrical resistance of conductors;
(b) high voltage test, *see also* Section 20;
(c) insulation resistance measurement;
(d) for high voltage cables, partial discharge tests are to be made in accordance with the requirements of IEC 60885-2, *Electrical test methods for electric cables. Part 2: Partial discharge tests*, or an acceptable National Standard, at the manufacturer's works prior to despatch.

Evidence of successful completion of routine tests is to be provided by the manufacturer, *see also* ~~1.3.3~~ 10.1.3.

Part 8, Chapter 1

Application

CORRIGENDUM

Section 3
Air environment

3.1 Air temperature

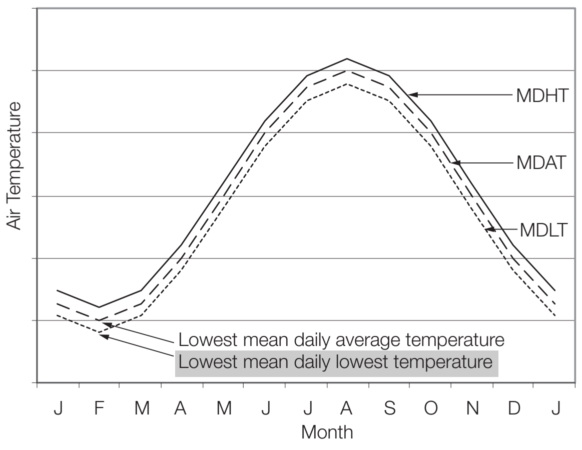

Fig. 1.3.1 Air temperature

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